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(54) Band gun

(57) A band gun comprises, in the channel at the front of the gun casing, a slide block 4 in which a blade 7 is located, a rod 44 extending rearwardly from the block normally pivoting a toothed trigger member 35, against a spring 34, out of engagement with the serrated underside of the surplus band 101. Actuation of the handle 31 causes ratchet-type feed of the band rearwards by the member 35, a toothed member 8 preventing its return, until the band is taut about the wires 9 and the band head 10 abuts the slide block 4. Further triggering action causes the head to push the block rearwards, raising a ball 72 from a seat 111 in the casing which moves the blade 7 through a cutting stroke. Springs 71, 6 return the parts on final release of the trigger.

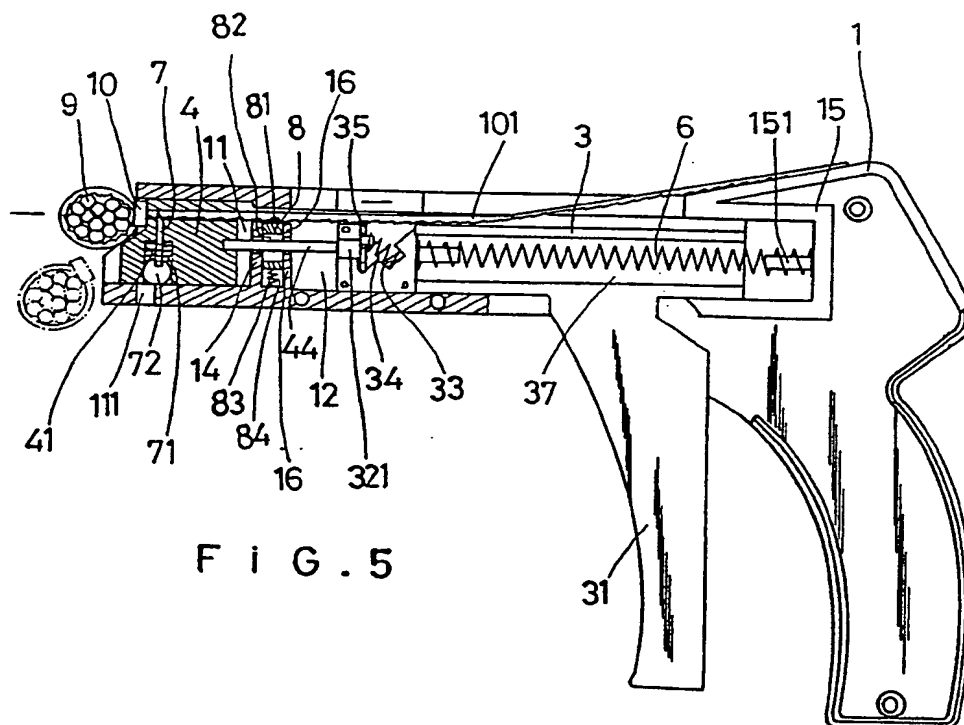


FIG. 5

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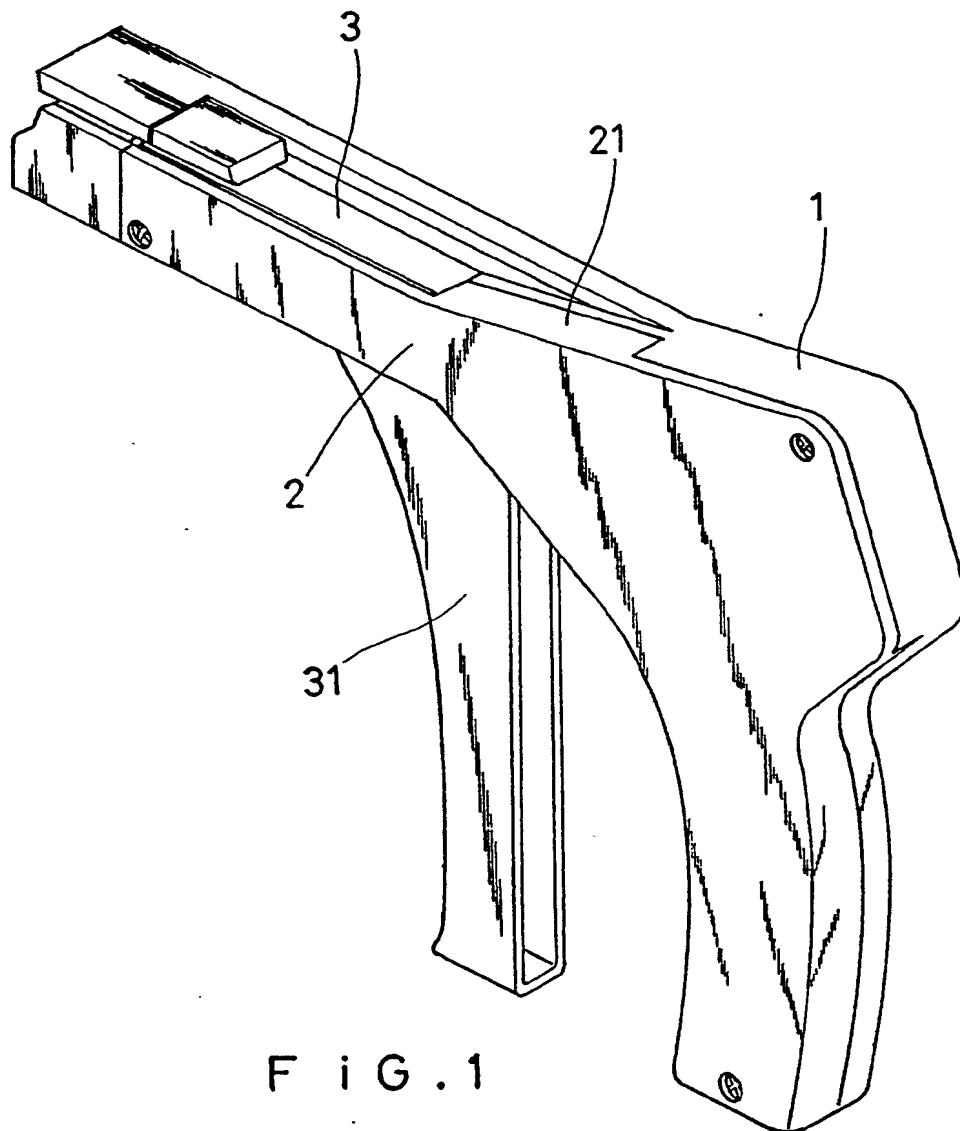


FIG. 1

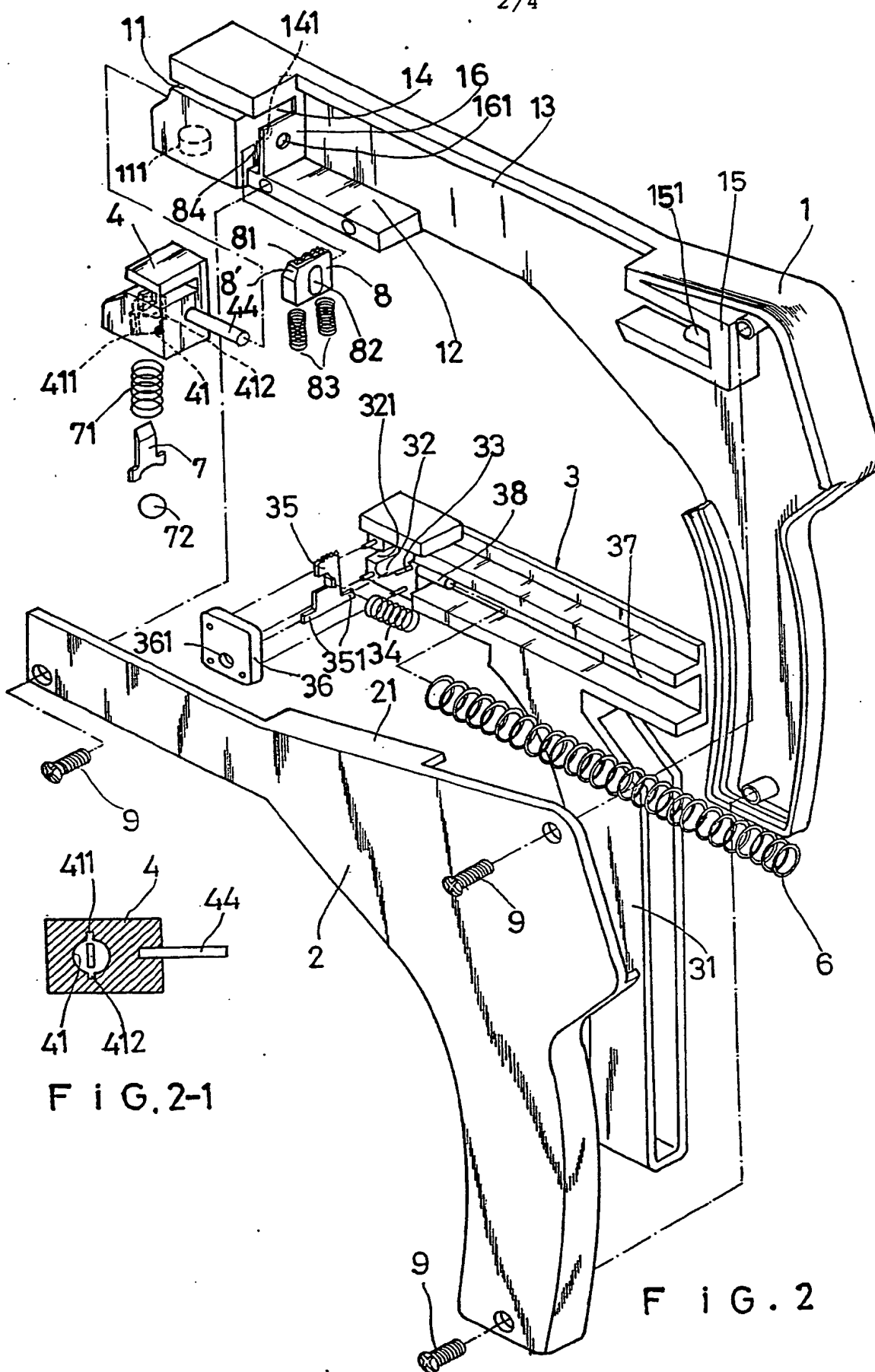
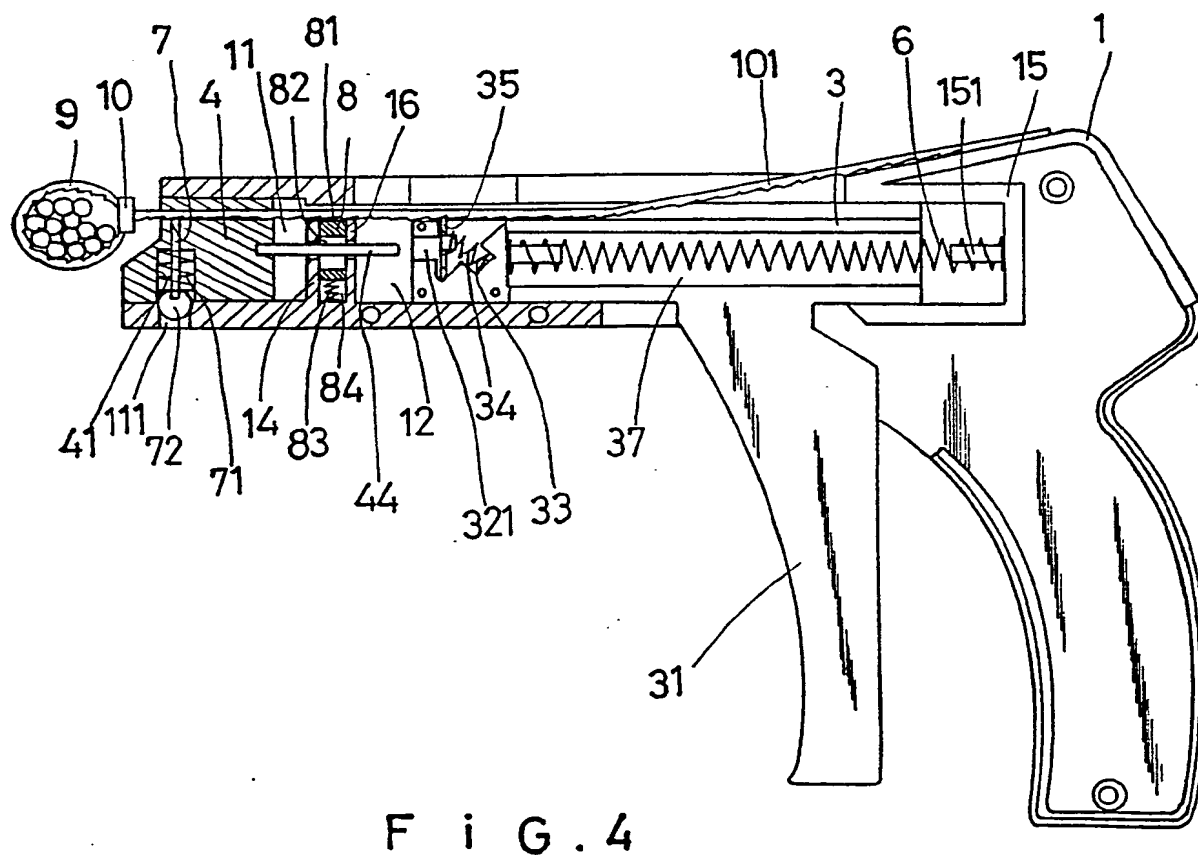
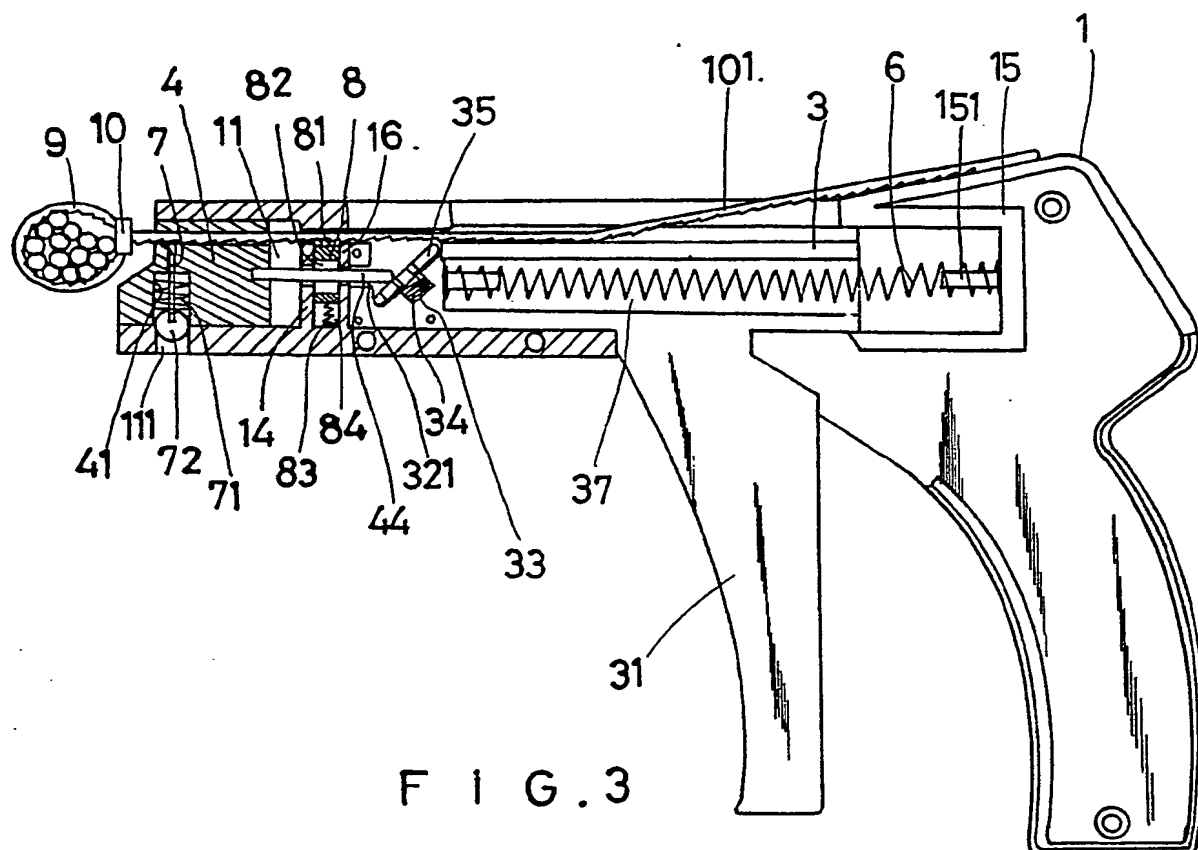
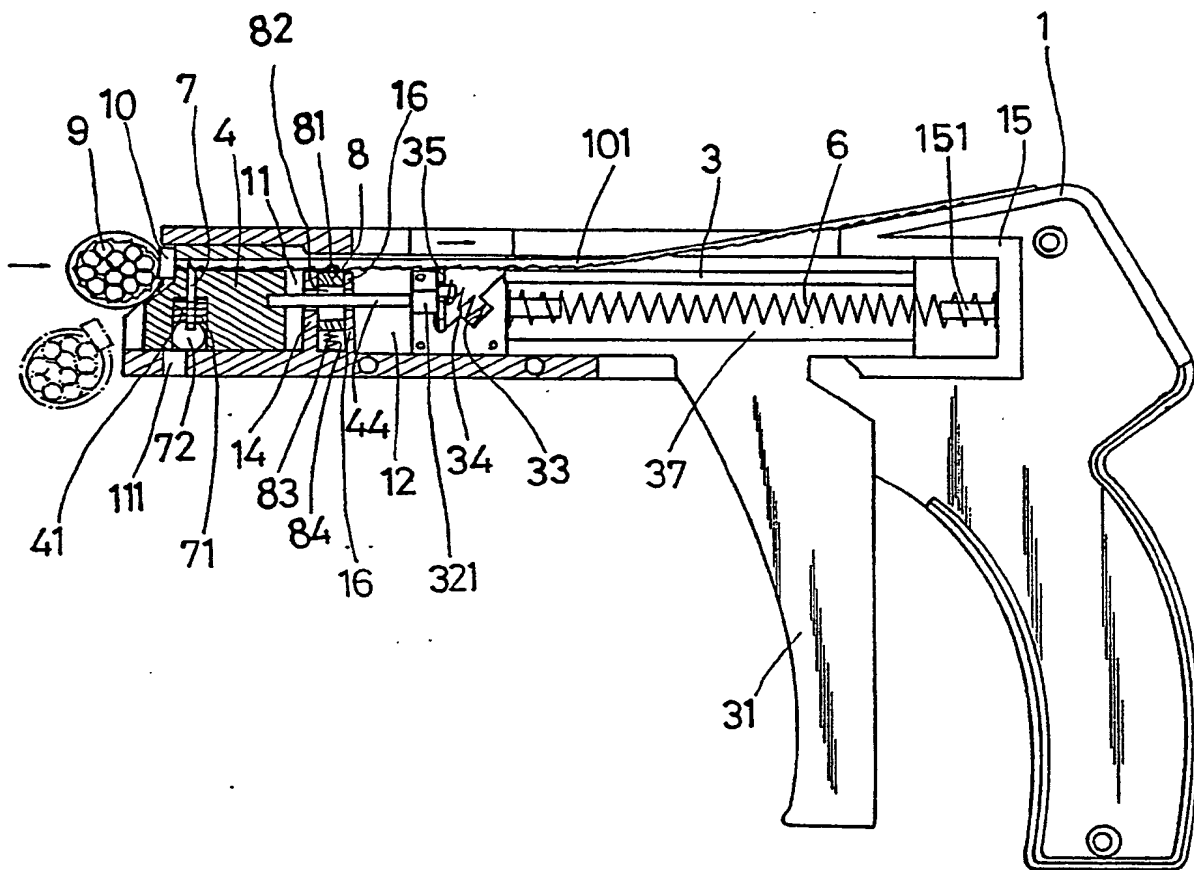


FIG. 2-1

FIG. 2





F i G . 5

gear (81) central position is long oval hole (82)'s check piece (8) at which appropriate place is a diagonal angle (8'), in the inner compartment (12) is a trigger unit (3) comprising mainly of a front pulling device and resilient construction and handle (31), at the front of the trigger (3) is an opening (321), and a slightly inclined channel (32), on which inclined wall is a cam shaft (351) with trigger board (35), which two cam shafts (351) are respectively fitted with the channel (32) and cover board (36)'s hole (361), and combined with the cover board (36) and channel (32), in which the trigger board (35) has inclined surface against the spring (34), as shown in Fig 4; on the trigger unit (3) is a crosswise trough (37) with a fixing key (38) to enable spring (6) end pressing inside it, the other end is pressed in the fixing seat (15) of the spring, so the trigger unit (3) can cause the pulling and sliding movement with the spring (6) resiliency, and on the base of the sliding block (4) is a channel (411)((412) in which is deep hole (41) in which is a set of cutting unit, including a "┐" shaped cutter (7), on which is a spring (71), lower arch opening is pressed against a steel ball (72), on two sides of cutter (7) are respectively along the conductor channels (411) (412), to restrict its up and down sliding movement, on the rear of the sliding block (4) is an extruding rod (44), inserting through the partition board (14)'s hole (141), check piece (8)'s long oval hole (82) and another partition board (16)'s hole (1661), and against the trigger board (35), so that it is inclined; Besides, the cutter unit's steel ball (72) in the sliding block (4) is placed inside the front inner compartment (11), so the steel ball (72) is jammed into the steel ball hole (111).

Referring to Fig. 3, Fig. 4 and Fig. 5 which are the embodiment section views of the trigger, embodiment section view of the trigger, and embodiment section view of the cutting mechanism, in which Fig. 3 and Fig. 4, when the band ring is on the electrical wire or cable (9), the band remaining band (101) by the pulling of the trigger (3), when the trigger board (35) leaves the extending rod (44), by the spring (34) resiliency and swings upwards and catches the remaining band (10)'s gear thread and pulled backwards, when each trigger unit (3) shrinks, the trigger board (35) is pressed by the extension rod (44) and depress the spring (34) and recovers the next preparation position, so the pulling device produces a single-way pulling, when the trigger unit (3) is pulled backwards, the trigger board (35) again spring up and insert into the gear thread and pull the remaining band (10) backward, and with the pressing of the spring (83), the top catching teeth (81)'s check piece (8) is caught onto the thread of the remaining band (101), to prevent the sliding back of the remaining band (101), this device saves the conventional procedure manual pulling, Fig 5, when the tightening band is the pulling device and gradually pulling tight, the band head (10) will press against the sliding block (4) and move inwards, then, because the steel ball 972) is pushed and move away from the steel ball hole (111) and elevate, and push the cutter (7) up and cut the remaining band (101), finally when the remaining band (101) is cut, the trigger unit (3) moves back rapidly, meanwhile, the trigger board (3)'s catching board (35) the other surface impact the extending rod (44), so the sliding block moves forward, and the steel ball (72) restores its position in the steel ball hole (111), (as in Fig 3)

CLAIM

1. A type of band gun, comprising mainly of a trigger unit in the main inner compartment of gun casing main unit, the trigger unit can slide to and fro, at the front inner compartment of the gun casing main unit is a sliding block, between the front inner compartment and the main inner compartment is a middle compartment, in which is a check piece, finally a gun casing cover is fixed onto the casing main unit by a screw into one unit. The features include: In the main inner compartment of the casing main unit it a spring fixing seat with a fixing key, on the gun top is a narrow and long band return window, at the base of the front inner compartment is a steel ball hole, on the partition board in the main inner compartment and the middle compartment and the front inner compartment are holes, in the body of the trigger unit is a cross trough with a fixing key to accommodate a spring at one end, the other end is spring fixing seat, at the front of the trigger unit is an opening, at the base of the sliding block is a deep hole, corresponding to the deep hole's two sides are channels, in the deep hole is a cutting unit, including a cutter, on the cutter is a spring, at the base of the cutter arc is a steel ball, on two sides of cutter are respectively channels, on back of sliding block is an extending rod, at the top of check piece is a catching gear, in its center is a long oval hole, at two sides of base are holes to accommodate spring, on outside of base is inclined angle to enable the sliding in of band.

2. As described in Item 1, in which the extending rod of the sliding block are corresponding to the holes on the partition board, the long oval holes of the check piece and the opening of the pulling device can be inserted.

3. As described in Item 1, in which, on the gun casing cover protruding is an inclined piece.